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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,561	12/04/2003	Kazunari Aoyama	392.1846	5449

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EXAMINER

ALPHONSE, FRITZ

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/726,561

Applicant(s)

AOYAMA ET AL.

Examiner

Fritz Alphonse

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4, 10.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 6, 10, 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Particularly, as to claim 1, it is not clear to what it meant by “an error detection/correction code generation circuit and error detection/correction circuit to be used are switched over dependent upon a kind, a length, and a timing of the data to be transferred.”

3. In addition, as to claims 6, 10, 11 and 12, it is not clear to what it meant by the limitations “the error detection/correction system according to claims {1, 2, 3 or 4} is used also for the serial transfer.” These claims as being indefinite in that they fail to point out what is included or excluded by the claim language.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5, 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zulian (U.S. Pat. No. 5,701,413) in view of Tsunoda (U.S. Pat. 6,282,688).

As to claim 1, Zulian (fig. 1) shows an error detection/correction system in data transmission between a plurality of modules that are connected via buses (17) in a controller, wherein a plurality of error detection/correction code generation circuits having a difference in at least one of an inspection bit length, an information bit length, and a correction capacity (col. 4, lines 16-48), and error detection/correction circuits corresponding to the error detection/correction code generation circuits are built into the system (col. 13, lines 43-47).

Zulian differs from claim 1 in that he does not specifically disclose an error detection/correction code generation circuit and error detection/correction circuit to be used are switched over dependent upon a kind, a length, and a timing of the data to be transferred.

However, the limitations are obvious and very well known in the art, as evidenced by Tsunoda (col. 17, lines 49 through col. 18 line).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to improve upon the recording medium, as disclosed by Tsunoda. Doing so would improve reliability of data transfer between a host computer and a recording medium by use of an error detection/error correction function.

As to claims 2-4, Zulian does not explicitly disclose an error detection/correction system, wherein the error detection/correction system switches over between error detection/correction codes to be used dependent upon on a phase of transmitting an address, a command, and data; and, wherein the error detection/correction system switches over between error detection/correction codes to be used, dependent upon a data quantity to be transferred.

However, the limitations are disclosed by (col. 17, lines 49 through col. 18 line). See the motivation for the same reason disclosed in claim 1 above.

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As to claims 5, 7-9, Zulian (fig. 1) discloses a controller in which a plurality of modules that adopt the error detection/correction system are connected via buses.

As to claims 7-9, Zulian (fig. 1) discloses a controller in which a plurality of modules that adopt the error detection/correction system are connected via buses

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington, D.C. 20231

or faxed to: (703) 872-9306 for all formal communications.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz Alphonse, whose telephone number is (571) 272-3813. The examiner can normally be reached on M-F, 8:30-6:00, Alt. Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert De Cady, can be reached at (571) 272-3819.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may also be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Fritz Alphonse

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June 9, 2006



ALBERT DECADY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100